

MEMORANDUM ON PROPOSED CONTROL OPERATIONS AT ELK LAKE,
DESCHUTES NATIONAL FOREST, AND DIAMOND LAKE, UMPQUA
NATIONAL FOREST

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Insect Control
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Elk Lake and Diamond Lake
Projects.

Memorandum
on
Proposed Control Operations
at
Elk Lake, Deschutes National Forest
and
Diamond Lake, Umpqua National Forest
in
October, 1926.

A. J. Jaenicke,
Forest Examiner.

W. H. Miller

General Statement

During the period August 23 - September 2, 1926, the mountain pine beetle infestation in the lodgepole on the shores of Elk Lake and Diamond Lake were studied. The situation calls for the following work, in my opinion:-

1. Elk Lake, Deschutes National Forest. Cutting and burning of 100 infested lodgepoles at a cost of \$1.50 each tree, or a total of \$150.00. Work to be done in October, 1926.

2. Diamond Lake, Umpqua National Forest. Cutting and burning of 125 infested lodgepoles on area covered by control operations in May and June, 1926, and cutting and burning of 175 infested lodgepoles on and near summer home sites at a cost of \$1.50 for each tree. Total cost, \$450. Work to be done in October, 1926.

The Elk Lake Situation

No control work was done at Elk Lake this spring because of the abundance of the beneficial insects in the infested trees and the defoliation of the larvae of the mountain pine beetle by them.

There were approximately 200 lodgepoles attacked and killed by the 1925 infestation in the more valuable portions of the shore line. The 1926 infestation has resulted in an apparently successful attack of 100 trees in the same localities. These trees will remain infested until June, 1927.

It is proposed to cut and burn the 100 trees now infested in October of this year. This will necessitate unusual thoroughness in marking because the infested trees are entirely green and can be easily overlooked. However, the difficulty of marking will be more than compensated for by the fact that control work in October will avoid any possible attraction of outside beetles by the burning of the infested trees and scorching of the living ones.

The infested trees are so scattered and the project so small that an allowance of \$1.50 for each tree is not too liberal. \$150.00 will therefore be needed for treating the 100 trees.

The 1926 infestation in the lodgepole within four or five miles of Elk Lake appears to be somewhat less than in 1925. Inasmuch as the 1926 infestation is concentrated in trees which are still green, no estimate can be made as to the severity of this decline.

The beetle problem at this lake is covered by the previous memoranda of December 14, 1925 and May 24, 1926.

The Diamond Lake Situation

The earlier phases of this situation are discussed in three memoranda dated December 14, 1925, and May 23 and June 21, 1926.

On the east shore of Diamond Lake between Two Bear Creek and Silent Creek, 123 lodgepoles were cut and burned in May and June, 1926, at a cost of \$920.00 or about \$1.30 for each tree. The new infestation which has appeared on this cleaned area is estimated at 125 trees. These new trees consist largely of trees scorched by last spring's burning, trees adjacent to those overlooked when the marking and treating was done last spring, and trees close to last spring's control work but not scorched to any extent whatever. About 20 trees were overlooked in last spring's work. Possibly 40 infested trees are now paying the penalty for this oversight.

No control work was done on the west shore of Diamond Lake. On the southwest shore of the lake, the summer home sites are located and to date 11 homes have been built. On these sites and in the vicinity, about 80 lodgepoles were killed by the 1925 attacks. I believe that there are now 175 trees infested by the 1926 attacks. On this part of the lake shore, lodgepole forms in most cases the only forest cover. I believe, therefore, that these 175 infested trees should be cut and burned, especially since the infestation is showing such a decided tendency to increase. No control work is recommended for the northwest shore of the lake because of its low recreational value.

To treat the 300 trees now infested on the east and southwest shores of Diamond Lake will require an allotment of \$450.00. If the allotment is made, it is urgently recommended that the work be done during the first two weeks in October, 1926 rather than next spring in order to avoid the possible attraction of beetles into the controlled areas by the burning of the infested trees and the scorching of green trees. Very careful marking will have to be done.

The infestation within four or five miles of Diamond Lake still continues to be largely confined to previously established centers. The 1926 attacks appear to involve a greater volume of lodgepole than the 1925 attacks even in those lodgepole stands which adjoin the treated areas.

In the control work of last spring, the location of all the treated trees was secured. This same plan will be followed in the event of further work this fall. These data will undoubtedly have experimental value. In fact, it is believed that the project as a whole will add considerably to our knowledge of the problems involved in handling mountain pine beetle infestations in lodgepole.

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